Case 1:19-cv-00078-RGA Document 201 Filed 10/08/20 Page 1 of 43 PageID #: 9732

1	APPEARANCES CONTINUED:
2	BAYARD, P.A.
3	BY: STEPHEN B. BRAUERMAN, ESQUIRE
4	-and-
5	GOODWIN PROCTER LLP BY: NATASHA E. DAUGHTREY, ESQUIRE
6	BY: EMILY RAPALINO, ESQUIRE BY: NICHOLAS K. MITROKOSTAS, ESQUIRE
7	For the Defendants
8	*** PROCEEDINGS ***
9	THE COURT: All right. Assume if I see her
10	she's not special and I will see the others pretty soon Lee,
11	am I all right?
12	THE COURT: All right. So okay. Now, I see
13	Mr. Brauerman, so we're starting to make progress here. All
14	right. So my deputy clerk is on the line. My court
15	reporter is on the line.
16	And this is Genentech vs. Aurobindo,
17	Consolidated Civil Action Number 19-78. And from the looks
18	of things I would say somebody from Morris Nichols
19	represents the plaintiff.
20	Who's on the line for the plaintiff?
21	MS. JACOBS: Good morning, Your Honor. This is
22	Karen Jacobs and Cameron Clark from Morris Nichols. And we
23	have on the line with us Mark Waddell and Ryan Hagglund from
24	Loeb & Loeb, and Mr. Waddell will be presenting today.
25	THE COURT: All right. Thank you.

```
1
                  And for the defendant, who's going to be making
 2
      the presentation? Who's the Delaware attorney?
 3
                  MR. BRAUERMAN: Good morning, Your Honor.
      Brauerman. (Inaudible.)
 4
 5
                  THE COURT: All right.
                  DEPUTY CLERK: Judge, we can't hear you for some
 6
 7
      reason. It doesn't look like you're muted, so I'm not sure
 8
      what's going on.
 9
                  THE COURT: There. Can you hear me now?
10
                  DEPUTY CLERK: Yes. I can, too, Judge.
11
                  THE COURT: All right. So Mr. Brauerman, why
12
      don't you try again.
                  MR. BRAUERMAN: I apologize, Your Honor. Steve
13
14
      Brauerman. I'm here --
15
                  THE COURT: All right. So Mr. Brauerman, mute
16
      yourself. Whoever your outside counsel is, can that person
17
      speak up?
18
                  MS. DAUGHTREY: Hi, Your Honor. This is Natasha
19
      Daughtrey from the law firm of Goodwin Procter.
20
                  Can you hear me okay?
21
                  THE COURT: I can hear you fine.
22
                  MS. DAUGHTREY: Great.
23
                  THE COURT: I'm going to just assume -- All
24
      right. In any event, you are presenting on behalf of all
      defendants; right?
```

1 MS. DAUGHTREY: That's correct. I'm presenting 2 on behalf of the defendants that have joined claim 3 construction. 4 THE COURT: Which means everybody except for 5 Amneal or someone? MS. DAUGHTREY: Correct. And I have two client 6 7 representatives that have also joined us. That's Bill Carey from Sandoz and Dan Forchheimer from Teva. 8 9 I also have my colleagues, Emily Rapalino and 10 Nick Mitrokostas on the line as well. 11 THE COURT: Okay. All right. Does anybody else want to put on the record that they're here? 12 13 All right. I'm satisfied that we've got the 14 people we need. So Mr. Waddell and Ms. Daughtrey, have you all communicated to each other as to which order you were 15 16 going to go in here. Normally plaintiff goes first. The 17 party with the dog goes second. But on the other hand, 18 generally when we're talking about indefiniteness, sometimes the defendant goes first. 19 20 Did you all talk about this to each other? 21 MS. DAUGHTREY: No, Your Honor, we haven't discussed that. We'd be happy to take it in whatever order 22 23 Your Honor prefers. 24 THE COURT: Mr. Waddell.

MR. WADDELL: No, we haven't discussed it, Your

25

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Honor, but if it's okay with my opposing counsel, Ms. Daughtrey, I could go first from the plaintiffs' standpoint just presenting our claim construction argument and stop short of responding to any of the indefiniteness defenses since I understand defendants don't really want to offer argument on claim construction. They just want to offer argument on indefiniteness. If that's okay, I would just do a brief opening presentation of our position, and then I could reserve time and come back later and respond. THE COURT: So is that right, Ms. Daughtrey, that though, if I'm not persuaded of the indefiniteness, then you're not really arguing what's the proposed claim construction? MS. DAUGHTREY: That's correct, Your Honor. believe that the claims are not amenable to any particular construction and that they're indefinite. THE COURT: Okay. All right. Well, then let's do this: Mr. Waddell, you can go ahead for like five minutes, which should be enough, and then I'll turn over to Ms. Daughtrey, and she can have up to 20 minutes. And then you can have 15 minutes in response or something like that.

Okay?

MR. WADDELL: Of course, Your Honor. And I'm

going to -- I think I understand how to share the screen, so let me see if this will work.

THE COURT: All right.

MR. WADDELL: Power-point file. We tried this out yesterday, and it took a minute or two for files to load. So I apologize for the delay, Your Honor.

THE COURT: Well, that's all right. There's a certain amount of delay that's inherent in this method of presentation and so do not -- I may get impatient about this or that, but I won't get impatient just because it takes a minute for your power-point to load or if we have other technical difficulties, because I do believe they are beyond anyone's control.

MR. WADDELL: All right. It says it's uploading now. What I could do just while I'm waiting for that to upload, there's a little bit of dead space, but I'd like to just give some brief background on what the invention is about and just set the table for what I think the issue is today. And within that five-minute time frame, I'll, of course, offer our position.

So the inventions that we're talking about concern treatment of the disease called idiopathic pulmonary fibrosis. It's abbreviated IPF. IPF is an irreversible and ultimately fatal disease. It's characterized by progressive loss of lung function due to the fibrosis. That's scarring

in the lungs. It hinders the ability of the lungs to absorb oxygen and there -- here we are. See if it will -- how do we do this? Oh, okay.

So at the time --

THE COURT: I'm sorry. Let me just interrupt to say that I have read the brief that was submitted, and I did review, perhaps even read the patent in question.

MR. WADDELL: Perfect.

THE COURT: So I have some background here.

MR. WADDELL: Very good. So I'll skip to the patents that we're concerned with and how this relates to the case. The infringement issue in the case is going to focus primarily on drug labeling, and I have up on the screen an excerpt from the drug labeling. This is information that the FDA requires. And when we get to the infringement part of the case, we'll be talking about this in the context of infringement.

And you can see I highlighted at the bottom there the labeling talks about dosage modification or interruption may be necessary for liver enzyme elevations. So that's -- how does this work? Ah, there we are.

So Your Honor's read the briefs. These are the disputed claim constructions. Plaintiff offers the one on the left. Defendants offer nothing. They want to argue indefiniteness.

And I'll briefly focus on the wording of the claims. This is claim 1 from the '729 patent. This was the first patent granted to Intermune for the inventions made during the clinical development of the compound. This is the first claim of the first patent.

And you can see that it's directed to treating IPF patients, and it has a clause in the middle, said patient having exhibited, and then the wording that I've highlighted there, is a Grade 2 abnormality in one or more biomarkers of liver function. So that's the phrase that we came to agreement with defendants that we'd be briefing for claim construction.

And how do I move forward? Okay. Specification of the patent. Again, this patent relates to modifying treatment for patients with atypical liver function. This relates back to that information in the labeling. And plaintiffs' position is that if we went back to the disputed claim phrase, it's talking about Grade 2 abnormalities. And the inventors in column 7 of this patent, Exhibit 1, they use the words adverse effect grades.

First, they said adverse effect grades for abnormality liver function are defined herein by, and then they cite established criteria that were developed and published by the National Cancer Institute. The inventors incorporated the information from those common toxicity

criterion into a table.

And you can see, this is Table 1 in the patents. And the word toxicity, there are highlighted the five biomarkers that the inventors included in this table. And then over in column -- well, it's the fourth column, but under two, you see ranges there. Each refer to ranges above an upper limit of normal.

And so what this means is that if you're running blood tests on a patient, certain blood parameters -- you know, when I go for a physical, I get my blood test, and it tells me what was looked at. It tells me what the normal range is and whether I'm above or low for things like cholesterol, for example. And what this is talking about is significant multiples, two-and-a-half times, up to five times the upper limit of normal for each of these specific markers.

And then we go over a little further down in the columns, they're paragraphs -- if I go back, so there were grade zero, one, two, three, and four. The claim only focuses on Grade 2, and the paragraphs beneath that are where the inventors write what each of those grids include.

So we have Grade 2 liver function abnormalities include, and then it lists them all. So this is what we point to as what the inventors intended by that adverse experience toxicity grading limitation that they put in the

claim.

We briefly also covered the prosecution history. This is some prior art concerning developments in Japan, and the examiner in granting this patent wrote this paragraph that we quoted. The highlighted language is actually italicized by the examiner himself meaning that this is the same phrase that we're construing. We submit that the examiner clearly focused on that phrase. He would have read the patent, and he would have read the specification in accordance with patent prosecution practice as examiners. And we submit that this just adds further evidence that the examiner clearly understood what this phrase meant since he was relying on it to grant the patents.

I'm going to stop there. If Your Honor has any questions about what I said, I'm happy to cover them. But otherwise, I'll reserve time to respond to the indefiniteness.

THE COURT: All right. Well, I do have a question or two, but I think it would be better to hear from Ms. Daughtrey first. So thank you for that.

Ms. Daughtrey, it's your turn.

MS. DAUGHTREY: Thank you, Your Honor. Let me just take over as presenter and see if I can get --

MR. WADDELL: Yeah, I'm pressing stop and -- there, you should be in it now.

1 MS. DAUGHTREY: Great. Thank you. 2 All right. Let me see here. 3 THE COURT: So Ms. Daughtrey, while you're 4 getting the screen up, I was curious whether -- because as I 5 understand it, there's three or four patents that claim the method that is, I quess, implicated by the FDA label. And 6 7 there's certain asserted claims that are mentioned in the brief as the ones that are at issue. 8 9 Are there other asserted claims relating to the 10 method that are not implicated by this indefiniteness 11 challenge? 12 MS. DAUGHTREY: Yes, Your Honor, that's correct. 13 And can you see my screen right now? 14 THE COURT: I can. 15 MS. DAUGHTREY: Okay. Great. So there's some 16 agreed-upon constructions that are -- so there are claims 17 that are not impacted by the indefiniteness argument. These 18 claims that I have up here on the board, as you can see, they specify what Grade 2 abnormality in one or more 19 20 biomarkers of liver function are required to satisfy the 21 claims. So even if Your Honor finds the disputed term indefinite, it would not impact these claims. 22 23 THE COURT: Well, and so because I assume this 24 does relate eventually to infringement, the claims that 25 you're asserting of indefiniteness, if they're gone, are you

getting some advantage in terms of defending against infringement that you won't have if they remain?

MS. DAUGHTREY: Your Honor, I think this would just narrow the claims in dispute, but it wouldn't -- I don't think this would impact an indefiniteness finding on the disputed claims. It wouldn't impact the infringement analysis in general, no.

THE COURT: So, and I don't mean to be -- so basically, in your view, this is essentially immaterial to the eventual shape that this case will have?

MS. DAUGHTREY: I wouldn't agree with that, Your Honor, because I do think that understanding the scope of the claims in terms of demonstrating obviousness, you know, it's important for the parties to understand what the scope of the claims are for obviousness purposes. And I do think it would be material in terms of reducing the issues that we have to present at trial.

But if your question is whether it's dispositive, that's -- it's not dispositive, that's correct, as to, you know, all of the issues in the case.

THE COURT: Well, no, I knew it wasn't dispositive as to all the issues in the case. But what I was really wondering, and I think you understand this, is whether it actually could be the difference between your winning and losing the case overall.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. DAUGHTREY: I mean, I guess if these were the only claims that remained at trial, it could make the difference between winning or losing the case altogether. THE COURT: Well, so I meant really something different which is, as you say, you have these other claims that are part of a method that are from these patents and which you're not arguing are indefinite. And I guess what I was trying to ask is I guess whether there's a function going on here that's beyond just reducing the number of asserted claims if I say that these ones are indefinite. MS. DAUGHTREY: I think Your Honor might be referring to a circumstance sometimes where the claim construction finding, you know, helps with some other aspect of the case. THE COURT: No, no, no. Actually, maybe I'm talking too circularly here. Does this make any difference? MS. DAUGHTREY: It makes a difference in terms of narrowing the issues, but it doesn't otherwise make a difference in the remaining asserted claims, if that's helpful. THE COURT: Well, it's kind of helpful. Well, I'll give Mr. Waddell a chance when it's his turn. Maybe I'm -- but any way, go ahead. MS. DAUGHTREY: Okay. Thank you, Your Honor.

So what I wanted to start with was what

plaintiffs turn to as the alleged definition -- sorry, let

me -- I'm going to skip around a little bit. Plaintiffs

have pointed to this section of the patent specification as

being definitional. And I think Mr. Waddell said that this

defines adverse effect grades for biomarkers of liver

function, but it actually doesn't have that phrase at all.

It doesn't have the disputed phrase in it. It refers to

adverse effect grades for abnormal liver function and the

disputed term actually doesn't appear anywhere in the claims

in the patent specification.

And so here when it's talking about the adverse effect grades, Your Honor, it's actually referring to the grading system that's used and not limiting it to the biomarkers that would be within the scope of the claims.

And so, you know, as an initial matter, the patent does not define the disputed term and the plaintiffs' construction is actually inconsistent with the rest of the specification, and so it can't be the correct --

THE COURT: Well, so before you get there,

Ms. Daughtrey, the common toxicity criteria that comes from
the common terminology criteria for adverse events,

published by the National Cancer Institute, do they have
similar grades, zero through four, for the other tests that
are vaguely related to liver -- the things that appear in
this 24 panel of chemical tests that are typically run?

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. DAUGHTREY: Yes, Your Honor. And on slide 22 here, you can see this is from the CTCAE which is incorporated by reference into the specification. It lists albumin, which is not one of the tests that's referred to in the patent, and it has a Grade 2 rating for an abnormality in albumin. It's the same. So it has the, you know, five tests that are referenced in Table 1, plus a bunch of additional ones. And they all have Grade 2 ratings as well in the CTCAE. THE COURT: And so, for example, going down five, I see cholesterol. Well, does cholesterol have anything to do with the liver? MS. DAUGHTREY: Yes, Your Honor. The CTCAE has a lot of other tests, but these are the ones we've identified are the ones that are specific to the liver. They indicate liver function. THE COURT: Okay. MS. DAUGHTREY: And it's not just the CTCAE that talks about these other liver function tests. You know, several of the references incorporated into the patent specification, the Abboud 2007 reference, the Tajiri reference, they also refer to albumin, cholesterol, glucose, these other tests that are indicative of liver function. THE COURT: Okay. Sorry. Go ahead.

MS. DAUGHTREY: Yeah. The next point I'd like

to turn to, Your Honor, was Mr. Waddell focused on the prosecution history of the patents. And just briefly on that point, the argument that the patentee was making during prosecution was that the prior art didn't disclose monitoring or reducing the dosage based on hepatic adverse events. They never made a distinguished -- an argument distinguishing the biomarkers of liver function in the prior art versus the biomarkers of liver function in the patent. And the examiner never made any findings as to which biomarkers of liver function would be included within the claims.

So the prosecution history of these patents doesn't really shed light on this issue. And I'd like to turn back to the specification as a whole. Mr. Waddell started with the one sentence at Table 1 that they assert as definitional, but when you look at the patent specification from the beginning to the end, it makes it clear that the five tests in Table 1 are not the limitations of the claim. And it's really unclear what the limitations of the claim are.

So on slide 15, I have here some of the first references in the patent to ALT, AST, bilirubin, ALP and GGT. And I'm just going to use the abbreviations for those. I think Your Honor's familiar with what the longer term is for those, but if you have any questions, let me know.

THE COURT: I'd prefer you use the abbreviations.

MS. DAUGHTREY: I understand. So every time the specification refers to these tests, it refers to them in a non-limiting way. It says an abnormal liver function may manifest as abnormalities in levels of biomarker, including ALT, AST, bilirubin and/or ARP. Then it refers to some embodiments having the biomarkers of liver function be ALT, AST, bilirubin, and ALP.

In fact, at column 6, this is the last box on my slide, it says examples of biomarkers of liver function include, but are not limited to and then lists those five.

And in fact, when explaining more about GGT, the patent says that elevated GGT has been observed in some patients receiving Pirfenidone without any clinical impairment, so elevated GGT alone is not necessarily a sign of liver impairment.

Then it states in any of the embodiments described herein, biomarkers of liver function can exclude GGT. This sentence is directly contrary to what plaintiffs assert is the definition of the disputed term.

THE COURT: Well, aren't there some claims that do exclude GGT?

MS. DAUGHTREY: There are some claims where the -- and those are the claims that are not disputed.

There are some claims that specify the biomarker liver function that would be ALT and AST.

THE COURT: Right. And isn't there one -- I thought I saw one that looked more or less like a Markush group that included everything but GGT.

MS. DAUGHTREY: I think that's right, Your Honor.

THE COURT: So you know, I mean, so I guess saying, well, the specification says embodiments, after all we're not construing embodiments, that it can exclude GGT.

And then having some claims where GGT is excluded, you know, I don't know, that doesn't strike me as very compelling for much of anything.

MS. DAUGHTREY: So Your Honor, if it said in some embodiments described herein, GGT can be excluded from biomarkers of liver function, that would be maybe more consistent with some of the dependent claims. But here, it says in any of the embodiments.

THE COURT: Right. But even then, you don't have to have an embodiment for -- you can claim stuff where you haven't shown an embodiment; right?

MS. DAUGHTREY: Yes, Your Honor. That's correct. And the real crux of the issue here is that a person of skill in the art would not know when GGT was within -- inside the claims or outside the claims. And it's

important to remember that the disputed term is one or more biomarkers of liver function. So it can include when there is just one biomarker of liver function that is elevated with a Grade 2 abnormality.

And so because the patent states that, anywhere you can exclude GGT as a biomarker of liver function, you wouldn't know when GGT alone would fall within the scope of the claims.

THE COURT: All right. Go ahead.

MS. DAUGHTREY: Thank you, Your Honor.

So in cases such as this where there is inconsistent use of a term in the specification that make it so a person of ordinary skill in the art can't understand the boundaries of a claim, that renders the claim indefinite.

And I just want to turn to another section of the specification that gives some more explanation for the ALT, AST, bilirubin, ALP. There are paragraphs in the specification that elaborate on some of these biomarkers of liver function, and it has a whole paragraph explaining how they're indicative of liver impairment.

There's no paragraph like this for GGT in the specification which further leads to confusion as to whether GGT is included in or outside the scope. And also, when it's referring to AST, and I'm on slide 18, the bottom left

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

```
box that I have up here says the ratio of AST to ALT can be
used as a biomarker of liver damage. And so this adds an
additional biomarker of liver function or liver damage.
            THE COURT: So Ms. Daughtrey, I'm still on slide
16 on my screen. Where in the specification does it have
this phrase about the ratio of AST to whatever the other one
was?
           MS. DAUGHTREY: AST to ALT. Can you see slide
18 right now?
           THE COURT: No, I'm looking at 16.
           MS. DAUGHTREY: Let me see.
            THE COURT: Does it have a citation on it to
wherein the patent? Because I looked for that because you
had said it in the brief, but I didn't --
           MS. DAUGHTREY: Yes, Your Honor. So that's at
column -- here, let me just -- I have a broader citation.
Let me pull up this broader citation here.
            It's between columns 6 and 7 of the '729 patent.
So this would be --
            THE COURT: Oh, I see it.
           MS. DAUGHTREY: -- 7, lines 3 through 4.
            THE COURT:
                        Okay.
           MS. DAUGHTREY: It shows AST to ALT can be used
as a biomarker of liver damage.
```

THE COURT: I see. Is there anything in the

National Cancer Institute grading system that gives grades for the ratio of AST to ALT?

MS. DAUGHTREY: Let me just go to my slide on that, Your Honor. I don't believe that that's identified in the CTCAE as one of the metabolic function -- liver function tests.

THE COURT: All right. So one of the kinds of disputes that I thought I saw between you and the other side was, you know, their view was you should be looking at the whole claim term, you know, which starts with a Grade 2 abnormality. And they said you were looking too narrowly at just biomarker or biomarker of liver function. And that the context of the whole phrase helps them, and that you were ignoring that.

What do you have to say about that?

MS. DAUGHTREY: Your Honor, the disputed term was raised in the context of plaintiffs first raised Grade 2 abnormality as a disputed term. Defendants responded by saying, well, you know, biomarkers of liver function is indefinite, and so the parties agreed to construe the entire phrase.

Given kind of what plaintiffs' argument that they're making, we agree that the Court should construe the entire phrase. And we don't believe that -- you know, we are not ignoring the first half of the definition and only

focusing on one or more biomarkers of liver function. We -I think it's clear from the patent specification that Grade
2 is referring to the grading system in the CTCAE. I don't
think that that's in dispute here.

But the question is: What biomarkers of liver function are included within that? And it's just not clear based on the specification language itself and all of the references that are incorporated into it.

THE COURT: Well, so if it turned out to be the case that the specification makes clear that there's only five Grade 2 markers that they're interested in, that the specification of the patent is interested in, wouldn't that sort of flow through, meaning those are the only five biomarkers we're talking about?

MS. DAUGHTREY: And Your Honor, I just restarted my screen to see if that fixes the issue. Can you --

THE COURT: It's loading.

MS. DAUGHTREY: Okay. So Your Honor, no, I don't think that would fix the issue. First of all, it is not able -- you're not able to reconcile Table 1 with other statements in the patent specification.

The other issue that there are portions of the claims that refer to resuming the dose of Pirfenidone when biomarkers of liver function return to normal, so it uses slightly different language than Grade 2 abnormality in one

or more biomarkers of liver function. And so a person of skill in the art still wouldn't know which biomarkers of liver function have to return to normal to resume.

THE COURT: So Ms. Daughtrey, the terms that just talk generally about biomarkers of liver function like you've just said, presumably they're -- oh, so I think I looked at this because in your briefing some places where it says biomarkers of liver function, it seems to be, though it's not done in the style that it should be, that that's just referring to the -- that, you know, the earlier terms, the antecedent basis arguably. Are there any standalone uses of the phrase, you know, return to or, you know, until biomarkers of liver function are within normal limits?

MS. DAUGHTREY: The patent specification uses inconsistent language in the examples about what has to resume to normal to increase the dosage of Pirfenidone. So the specification doesn't provide further context on that, Your Honor. And because -- and the biomarkers of liver function alone, I don't think there is an antecedent basis for this in the earlier claims. That's not the way I would read the claims.

THE COURT: Well, because I am now seeing slide 28, if for example, claim 2 said the method of claim 1 wherein prior to step A Pirfenidone is discontinued until the biomarkers of liver function are within normal limits,

would you be saying, yeah, okay, no problem there?

MS. DAUGHTREY: Correct, Your Honor. That's exactly right.

THE COURT: And yeah. I mean, okay. That's kind of what I thought. But I mean, that seems like maybe a different claim construction issue than the one that we're dealing with now or there's a claim construction issue there that I would have to decide to give this argument any weight which is really whether or not the until biomarkers of liver function, which seems to me are clearly meant to refer back, you know, whether there is an antecedent basis problem or there's an antecedent basis problem that I can fix. Because it does seem to me pretty clear as to what the reference is supposed to be.

In any event, go ahead.

MS. DAUGHTREY: Your Honor, just briefly on that. As I mentioned earlier, the claims encompass one or more biomarkers of liver function. And so an additional reason why this is not clear is because the claim 1 could include a situation where there's a single biomarker of liver function that it has a Grade 2 abnormality, and then claim 2 refers to until biomarkers of liver function are within normal limits. And it's simply not clear how a person of skill in the art would know what they should be, you know, whether they would infringe the claims if some

1 biomarkers of liver function are within normal limits or 2 only the one that was elevated is back within normal limits. And Dr. Thannickal also discussed that 3 4 biomarkers, other than these five that are in Table 1, can 5 be abnormal and impact the decision whether to resume a dosage of a drug that is suspected of causing a drug-induced 6 7 liver injury. And the patent simply doesn't address that 8 kind of real-life application. And so, again, a person of 9 skill in the art practicing this in the real world simply 10 wouldn't know whether they infringe the claims which is kind of the hallmark of indefiniteness here. 11 12 THE COURT: Okay. MS. DAUGHTREY: And --13 14 THE COURT: I'm sorry. I was curious about one 15 thing because I'm easily distracted. What is the origin of 16 why the doses are 2,400 milligrams a day or 2,403 milligrams 17 a day? 18 MS. DAUGHTREY: I don't know if I can answer 19 that, Your Honor. The patentee -- I mean, I would say that 20 that was an arbitrary choice --21 THE COURT: Okay. MS. DAUGHTREY: -- to avoid obviousness, but --22 23 THE COURT: Yeah, not a very good way of 24 avoiding obviousness, but okay.

All right. So your time is nearly up here.

25

What else would you like to make sure that I understood?

MS. DAUGHTREY: Your Honor, I think one thing that I just want to make clear is that plaintiffs predominantly rely on this argument that there's a definition in the specification, but in their reply papers they argue for the first time that this is actually just a plain and ordinary meaning, and everyone would know what this term means.

And when you look at the intrinsic evidence to the patent, that's simply not true. These are the references I have up here on slide 31. Can you see it?

THE COURT: Yes.

MS. DAUGHTREY: Great. These are the references that -- some of the references that are incorporated into the specification, and each of these have different examples of biomarkers of liver function or liver function tests that can be used to determine whether there's a drug-induced liver injury. And it's just clear that across the board, it varies depending on which clinician, you know, what patients -- the patient history.

And plaintiffs here are trying to, you know, have an exclusive monopoly on an invention, and the invention is supposed to be that you know when to be able to reduce Pirfenidone in an IPF patient and when to resume treatment. And plaintiffs are not entitled to that unless

they tell you the clear boundaries of the scope of the claims.

And the intrinsic record here just has contradictory definitions and contradictory examples of biomarkers of liver function are. And so a person of skill in the art would not be able to tell with reasonable certainty how -- you know, whether they were infringing the claims.

THE COURT: Okay. Thank you.

I'll give you a couple minutes when Mr. Waddell is finished to respond to his most outlandish arguments.

Okay?

MS. DAUGHTREY: Thank you, Your Honor.

THE COURT: All right. Mr. Waddell, your turn.

MR. WADDELL: All right. Your Honor, let me get the power-point up again. There we go.

Okay. That's loading. So while we're waiting for that, I can address the questions that Your Honor began with about materiality to the eventual shape this case will have.

THE COURT: Yes.

MR. WADDELL: Those are questions that we have as well. We framed ours a little differently in the form of contention interrogatories. There is a dispute regarding responses to those that has not yet been presented to the

Court; therefore, I don't think it's proper for me to go further into that, just to acknowledge that plaintiffs have the same questions concerning why defendants are fighting about these claims.

THE COURT: Okay. Thank you.

MR. WADDELL: All right. The slides are up.

THE COURT: Yes, they are.

MR. WADDELL: I'd also just briefly address the question about the dose because I know that's bothering Your Honor.

THE COURT: Well, it's not so much bothering, but it's just the oddest thing I've ever seen.

MR. WADDELL: Yeah, the reason -- when the clinical trials began way back when, the actual physical embodiment of the drug that they had on hand was a capsule. Capsules come in certain sizes. And this particular capsule filled to a weight of 267 milligrams. So in order to have new data that Intermune was developing be able to be reviewed, along with old data that existed for the drug, you had to keep using the same dose. So 267, if you do a multiple of that and triple, that's 801 milligrams. And the dosing of this drug was three times a day, so that adds up to 2,403.

THE COURT: Okay. Yeah, I couldn't figure what the relationship between 801 was. Okay. That satisfies my

curiosity.

MR. WADDELL: All right. So you can -- at least that won't be bothering you in the back of your mind.

So the other point, Your Honor's quite right.

We've got a dispute over what the dispute is about. We're saying that the dispute for today concerns a claim construction issue about this entire phrase which is focusing on the diagnostic method used for determining whether patients -- and let me go to the claim -- whether patients have a Grade 2 abnormality.

Now, we contend that the five criteria for Grade 2 that are presented in Table 1 that come out of that CTC National Cancer document are the ones that the inventors clearly intended to cover. If defendants had wanted to present an alternate claim construction argument saying, hey, wait a minute, there are a few more biomarkers in that list that should be added, that's a claim construction issue, and we'd only be discussing whether the claim should be broader in light of defendant's argument or whether it should be construed the way plaintiffs say.

That's not an indefiniteness argument. It's just a claim construction argument.

And let me just jump ahead.

THE COURT: So --

MR. WADDELL: Yeah.

THE COURT: So Mr. Waddell, I mean, one way to understand your argument, which may or may not be the way that you have intended it, is when you say the is defined by discussion of Grade 2 abnormalities is definitional, what you're actually saying or is that there's five Grade 2 abnormalities which are in Table 1, and they're the only five that are at issue. So the fact that biomarkers of liver function could include lots of other things or at least some other things is kind of irrelevant because the only five that are at issue are the five that are in this table.

MR. WADDELL: That's correct, Your Honor. And I could mention one of the examples of the extras that got left off this list. Defendants raised this albumin. And to address that, plaintiffs submitted in their reply position, they submitted an expert declaration from Dr. Steven Nathan where he addresses that.

Dr. Nathan confirmed that the five biomarkers listed in Table 1 are what clinicians use. They're the biomarkers he uses to monitor his own IPF patients. And he mentioned the reason albumin or albumin, I don't know how to pronounce it, is not used in this context is that it's not specific. It's indicative of a lot of other things, including the fact that the patient has IPF.

Okay. So Your Honor's quite correct, the way

the inventors wrote this, the claim contains that term Grade 2 which is an adverse effect grade. And they say here in column 7 of the patent that adverse effect grades are defined herein by the CTC criteria provided at Table 1. And I think Your Honor understands that.

If I could analogize this. If I booked a hotel room and it says in-room breakfast is included. I check in the hotel. I'd look at the breakfast menu that's on the table, and I would assume that what's included is what's on that list and nothing else. I mean, this is the breakfast menu, if you will, of what's included.

And they reinforce this point with their paragraph -- whoops. How did I do that? It looks like I jumped ahead too far, but they reinforced it. The paragraph defining Grade 2 liver function abnormalities where they use the same five biomarkers and the same grades.

Two-and-a-half times up to five times the upper limit of normal for four of them and then bilirubin one and a half to three.

If I could jump ahead.

THE COURT: Mr. Waddell, I take it what you're showing by this slide right here, essentially what you're saying is, though the specification uses slightly different words, you know, biofunction or biomarkers of liver function, that a person of ordinary skill of the art reading

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

this would understand this is really talking about the concept that we're trying to construe today; right? MR. WADDELL: That's right, Your Honor. should say we submitted Dr. Nathan's declaration, in part, to address that very issue, how would a person skilled in the art have read this patent. And this is what he says. mean, this is how he reads it in the clinic in his own clinical practice. And in his view, the defendants in their position and his colleague, Dr. Thannickal in his declaration are just trying to introduce a lot of confusion in what is actually a very clear, well-understood concept in his view. Also, if I could jump ahead to some excerpts there. THE COURT: Actually, you know, Mr. Waddell, I think --MR. WADDELL: Yeah. THE COURT: -- for one reason or another, I might have actually looked at Dr. Nathan's declaration, and it's possible I have something else in mind. But I like the way he kind of went back and forth from being a clinician to being a lawyer. So I usually tend to discount it when the

MR. WADDELL: I hear you, Your Honor. And the

doctor also pretends to be a lawyer.

parts where he sounds like a clinician, obviously, are the parts that he's putting out there. The parts that sound like a lawyer are the parts where he's informed by the lawyers how these issues are framed legally so that he can try and put his clinician confidence in the correct context.

THE COURT: And you know, I say this not directed at you because I see it all the time, but this is the reason why most of the time I pay no attention at all to expert declarations in Markmans is because, you know, portions of them are so obviously just the lawyers getting the doctor to sign something saying what the lawyers are saying. And that's just not helpful.

MR. WADDELL: Yeah.

THE COURT: You know, so I see it all the time. It's something that seems to me irresistible to lawyers on both sides and in patent cases, but you know, it's just not helpful.

MR. WADDELL: We'll take that criticism in the spirit it's intended, Your Honor, and I agree with you. I wish we could have brought Dr. Nathan in to just explain himself directly to the Court, but of course, you know, this is not the time or the place for the Court to be hearing from these witnesses. I would just say that, you know, as lawyers or lay people, you know, we can all go on the Internet and try and self diagnose things, and I think that

just turns us all into hypochondriacs.

There's a reason why we have people with M.D.'s after their name. And I just put a little information up on the screen about Dr. Nathan and his background. He's obviously qualified. And I think if there are questions that the Court has going to what people skilled in the art actually view here and what they consider in reviewing this patent, it would be best just to call him and let him explain for himself.

THE COURT: Well, I don't think that's going to be necessary at this time, but I -- that is actually my experience is that when you get experts who submitted declarations that sound like the expert's a lawyer, most of them when they're actually testifying sound a lot more comfortable in whatever their area of expertise actually is.

But go ahead. Let's move on.

MR. WADDELL: Yeah. Okay. So let me just see.

I took some other notes of questions that were asked when my colleague was discussing the difference, the different explanations of preferred embodiments in the specification,

I think Your Honor understood that. We don't construe claims limited to the preferred embodiments. There are some dependent claims that do address these.

And let me jump ahead because Your Honor did ask questions about other claims in the case. So the claim we

began discussing, claim 1 of the '729 patent is followed up by five dependent claims. And these are all modifying the dose modification step, step A, in the preceding claim. You do have to read the dependent claims together with the independent claim. Right.

THE COURT: Yes.

MR. WADDELL: And let me jump ahead to some that are not disputed. This is the first phrase not disputed. So in this patent, the '462 patent, we're asserting claim 28 which depends from claim 26. So claim 28 began as adjusting the dose modification step of step A. And here in claim 26 which is not disputed here, the claim phrase we agreed on is a Grade 2 abnormality in one or both of ALT and AST. These are the acronyms for those two biomarkers after first Pirfenidone administration.

So this claim where these or these two claims, these are addressing a preferred embodiment where the inventors are focusing now just on ALT and AST. Okay.

But to understand again what this claim means,

Grade 2 abnormality again goes back to the grading system

which takes you to Table 1 in the patent where the inventors

provided the menu of biomarkers with established normal

limits and established Grade 2 elevations that they drew

from the document published by the National Cancer

Institute.

So we do have a fundamental dispute about whether you need to read the entire claim phrase and not just the last words in the claim in, the last words of -- the last words in the phrase. It's like if you want to know where a train is going, you go to the locomotive and ask the engineer where he's heading. You don't go to the caboose.

And so that, I think, leads to a lot of confusion in the briefing as well because we can't even agree on what I think we're arguing about. Our position, though, for purposes of claim construction is you read the claim as a whole. You read the claim phrase that is in dispute as a whole.

I'll just put it up here from another claim.

Grade 2 abnormality in one or more biomarkers of liver function, and you go back, and you read the patent. You read what the inventors intended. And what they say they intended is the menu they provided in Table 1.

THE COURT: All right. Are you done?

MR. WADDELL: I can be, unless Your Honor has questions.

THE COURT: Okay. No, I think I'm ready to give Ms. Daughtrey the last word here.

Thank you, Mr. Waddell.

MS. DAUGHTREY: Okay, Your Honor. Let me just put up my slides again.

1 THE COURT: Sure. 2 MR. WADDELL: I'm trying to push stop. There we 3 How do I stop? Can you get your slides up? 4 MS. DAUGHTREY: Yeah, let me try. It's about to 5 go, I think. MR. WADDELL: Yeah, I apologize. I just see 6 7 mine and take over as presenter. I don't want to push any buttons. 8 9 MS. DAUGHTREY: Okay. Can you see my slides 10 now? 11 THE COURT: It indicates they're loading. 12 MS. DAUGHTREY: Okay. Let me just start with one point, Your Honor. Mr. Waddell referred to some of the 13 14 statements in Dr. Nathan's declaration about albumin and what persons of skill in the art would understand to be, you 15 know, the five biomarkers of liver function. And if you 16 17 look at Dr. Nathan's declaration, he doesn't cite anything, 18 especially not any contemporaneous evidence to support these 19 statements. And in fact, there's contemporaneous evidence, 20 including evidence cited within the specification that 21 contradicts some of his opinions on that. 22 Are you able to see my slides right now? 23 THE COURT: I am, Ms. Daughtrey. 24 MS. DAUGHTREY: Okay. So I'm looking at slide 25 55, and this is the Abboud 2007 reference which is

incorporated into the specification. And it lists albumin as a liver function test. And it also lists ALP, AST, bilirubin and prothrombin time. So the idea that albumin is not used in clinical practice to determine whether there's been liver function impairment is just not correct.

And then I'd like to turn to slide 38. And this other argument that Mr. Waddell referenced and that Dr. Nathan made is that it's clear that the claims are limited to these five tests because those are the ones that are specific to the liver. And albumin is not specific to the liver.

But the patent itself refers to the fact that some of the biomarkers of liver function are not specific to the liver. It says that GGT can be elevated without having any liver impairment. So it's not specific to the liver.

And AST can also result from damage to other sources.

It also refers to ALP as usually reflecting a biliary tree disease which is not a liver function or not -- that means it's not specific to the liver. And so the intrinsic evidence contradicts this argument that only biomarkers that are specific to the liver are included within the claims.

I'd like to turn next to the breakfast analogy.

I think Mr. Waddell's analogy kind of misses the point. The better analogy would be that there's a breakfast menu, and

there's an asterisk that says Not all items listed below are included in the breakfast package. And so you wouldn't know which ones are included or not. You know, it might have a list of, you know, pancakes, and sausage, and eggs, and OJ, but you just don't know which ones are in there or not. And so I don't think that that analogy really is appropriate for the claims here.

Finally, Dr. Nathan's opinions that these five are the ones that everyone would just know, you know, what they are when you say biomarkers of liver function, it means the five at Table 1. That's contradicted by Dr. Nathan's own employers, the liver panels that they use. It doesn't just list the five. It lists several others, including albumin.

And I'm on slide 34 here. Albumin, ALP, ALT, AST, total protein, GGT and prothrombin time. Dr. Nathan's other employer, VCU Medical Center, and I'm now on slide 35, again refers to albumin as a hepatic or liver function panel, and then protein as an additional one.

And so, you know, Dr. Thannickal, I hope Your

Honor noticed that Dr. Thannickal actually provided

contemporaneous citations for his opinions, whereas

Dr. Nathan did not. And I think that's a key distinguishing

factor between the two declarations, and so Your Honor

should discount Dr. Nathan's opinions in that regard.

And finally, on the argument that defendants are somehow taking a portion of the claim and construing it in isolation, defendants are not doing that. The claim as a whole is indefinite because even if you knew what Grade 2 meant, you wouldn't know the next phrase which is one or more biomarkers of liver function. The patent just provides contradictory explanations for what is included within or out of the scope of the claims.

And a final point on this, Your Honor, is that the argument that there is a definition for the disputed term, I don't think that even plaintiffs can dispute that the disputed term is not in this definition. It refers to adverse effect grades for abnormality liver function. It doesn't say biomarkers of liver function.

And in other portions of the specification, I'm on slide 43 here, when the patentee was defining a term, it made it very clear which term it was defining. So in the top left corner on the slide here, at column 2, line 22, it says, As used herein, original full target dose means and they define it. The patentee knew how to define words in the claims, and that's consistent throughout the patent specification.

And what plaintiffs point to as the definition of the disputed term doesn't have a disputed term, doesn't use the format that the patentee used throughout the rest of

the specification. And the case law is clear that you have to be very clear when you're defining a term for it to take a definition that's contrary to the general understanding of the term.

THE COURT: So Ms. Daughtrey, it seems to me that you have to be right that you cannot -- it's pretty hard to have lexicography of a term when you don't actually even say what the term is. But what about whether or not the sentence adverse effect grades for abnormal liver function are defined herein by the modified common toxicity criteria, CTC, provided in Table 1 for what are the adverse effect grades? Doesn't that seem pretty definitional?

MS. DAUGHTREY: In terms of what grading system you use, we wouldn't dispute that the specification is telling the person of skill in the art what adverse effect grading system they should use because there's multiple grading systems. But that just refers to --

THE COURT: But it's more specific than just saying, you know, use the adverse effect grading system of the National Cancer Institute. It says the adverse effect grades are provided in Table 1; right?

MS. DAUGHTREY: Correct, Your Honor. But --

THE COURT: And --

MS. DAUGHTREY: Sorry. Go ahead.

THE COURT: Well, and so isn't that pretty much

**4** 

2.4

defining what the adverse effect grades are? They're the five grades that are listed in Table 1?

MS. DAUGHTREY: Your Honor, the Table 1 was provided to give you the numerical range for some of the biomarkers of liver function. And the next sentence in this definitional sentence of this definitional section of the patent incorporates the entire CTCAE into the patent. And so you have to read the patent as if the entire CTCAE is there, you know, for convenience sake, though don't include the entire thing because it would be too long. And they've just included some of those, but the patent is not carving out all of these other biomarkers of liver function that are referred to in the CTCAE and any other references that are incorporated into the patent specification like Abboud 2007.

THE COURT: All right. Thank you,
Ms. Daughtrey.

All right. Well, thank you both, counsel. I found this helpful. I'm going to take the question under advisement.

Do I have anything scheduled in this case any time in the near future that involves me, or are we basically now where I'm going to write something on this claim construction, and the next time I'll hear from you is when one or the other of you decides to spend some of your client's money on Daubert motions?

	MS. DAUGHTREY: Your Honor, I'm just trying to
2	pull up the schedule. I don't recall, off the top of my
3	head, if we have any other upcoming conferences with Your
4	Honor.
5	THE COURT: Okay. Well, I can look that up.
6	All right.
7	Well, so I'm going to sign off. Thank you very
8	much for your time today and everyone take care. All right?
9	MS. DAUGHTREY: Thank you, Your Honor.
10	MR. WADDELL: Thank you, Your Honor.
11	(Markman Hearing was concluded at 10:42 a.m.)
12	I hereby certify the foregoing is a true and
13	accurate transcript from my stenographic notes in the
14	proceeding.
15	/s/ Heather M. Triozzi Certified Merit and Real-Time Reporter
16	U.S. District Court
17	
18	
19	
20	
21	
22	
23	
24	
25	